Sustainable Farming: Building the Identity of Women as Farmers

ANJAN SWAR

Introducing sustainable organic farming and power-operated implements, holding training programmes and exposure visits for women farmers, thereby enhancing their knowledge and decision-making abilities has been a rewarding investment of the PRADAN team in some villages of Odisha, creating the path to self-sufficiency and food sufficiency

"In the last three years, I have been able to harvest more in paddy and vegetable cultivation by using organic fertilizers and nutrients. The duration of fruiting has also become longer. There is high demand for organic vegetables in the market; therefore, the consumers mostly buy from me. I know that recognition for me as a farmer has increased—in the family as well as in the village. I think that this is a big change for me." Manjulata Mohanta says proudly.

Manjulata is a resident of Khireitangiri village, in Patna block (Keonjhar district), and is a member-cum-secretary of the Jhansirani Self Help Group (SHG). Manjulata got married in 1998 into a very poor family. She joined the SHG in 2003 and found a platform where she could share her problems and receive support. She has seven members in her family, including her three daughters and one son. She has about 3.5 acres of agricultural land.

Earlier, the family was only cultivated *kharif* paddy in their land, as per the traditional practice. They grew some vegetables on their homestead for their personal consumption. They also used chemical fertilizers and pesticides. Largely, the family planted paddy and vegetables in the *kharif* season and potatoes, onions in the *rabi* season. Additionally, they cultivated cauliflower in 5 decimals of their land and earned Rs 4,000–5000 per season.

They have a well in their homestead as irrigation support. They used to lift water manually from the well until they installed a pump-set. In 2014, Manjulata did the agricultural planning for the first time and decided to opt for organic farming in her field. She started sustainable practices in half an acre of land where she planted vegetables. She prepared vermi-compost, *handikhaata* (preventive pesticide), *agniastra* (organic insecticide), etc., for organic farming in the up-land and for the homestead creepers (mostly cow-pea, bitter gourd, ridge gourd, cauliflower) during the first year.

For creepers, the interventions introduced were setting up the trellis and using organic fertilizers and pesticides. Yields have increased from 25 quintals per acre to 40 quintals per acre. For cauliflower, in 2013–14, when she applied only organic pesticides (*handikhaata* and *agniastra*), she earned a net profit of Rs 1,05,000 from her half-acre of land, with cropping in *kharif* as well as *rabi*.

Through these sustainable farming methods, not only has her income but her dignity and confidence have also increased. She is one of the many women PRADAN has been able to reach through our interventions

She has now become confident about this sustainable practice. Yields have increased and expenditure has decreased due to the use of organic products and the use of the trellis method for the cultivation of creepers.

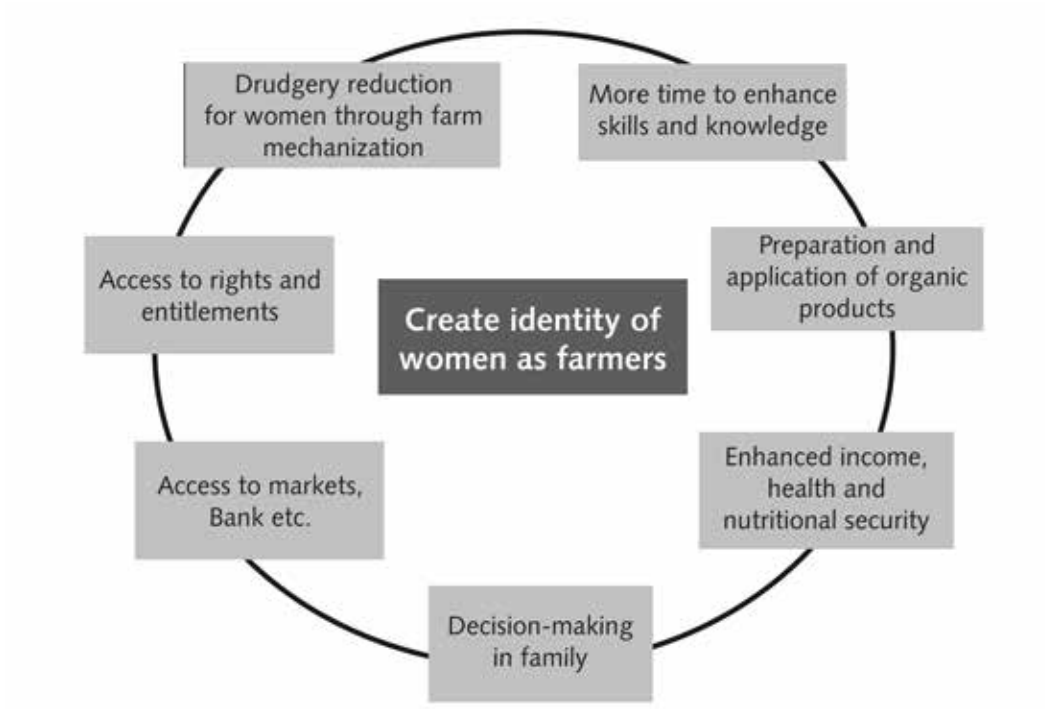
The next year (2014–15), Manjulata invested Rs 1 lakh as an advance to purchase an auto-rickshaw. Her husband is now driving it in the local area and also transports vegetables to be sold in the market. Manjulata adopted SRI for first time that year on 1.4 acres of land, using organic practices. The Mahila Kisan Sashaktikaran Pariyojana (MKSP) Project helped Manjulata get a pump-set for irrigating her land. She increased her vegetable area to 0.75 acres, thanks to the pump-set and manual farm implements such as a vegetable marker, a weeder and a ridger. She sold her paddy and got a profit of Rs 17,000 and the *kharif* vegetables (leafy vegetables, brinjals, potatoes, bitter gourds, etc.) earned a profit of Rs 90,000. That year, she had not planted the *rabi* crop due to her daughter's marriage. She was able to utilize this money she earned for her daughter's marriage.

She cultivated her crops again with a similar plan in 2015–16 and got a profit of Rs 1,10,000. This year, again, she was unable to plant the *rabi* crops due to drought. She is, on the whole, happy with her organic practice although she does sometimes face difficulties in purchasing organic and bio-products such as vermi-compost, bio-fertilizers and neem oil from the market due to their unavailability.

She told us that she gets more respect in her family due to her enhanced knowledge and the income that has come through her practices. She also feels empowered now to participate in decision-making in her family. Since last year, she has invested in four LIC premiums of Rs 17,700 in her name and in the name of her husband and children. Through these sustainable farming methods, not only has her income but her dignity and confidence have also increased. She is one of the many women PRADAN has been able to reach through its interventions.

SUSTAINABLE AGRICULTURE AND WOMEN

Sustainable agriculture is the production of food or animal products, using improved farming techniques that protect the environment, the health of the communities and the animals, and at the same time provides economic benefits. However, merely increasing production and profit may not create the change that we are aiming for. Agriculture is calculated as an occupation of the household, involving both men and women. Although women do most of the work in any cultivation, they do not receive any credit for it. The mention of 'the farmer' usually evokes the image of a man. And consequently, all the programmes, schemes and technical support for agriculture are directed at and are provided to men. Women are completely neglected and have the least access and control while making the highest contribution to the work

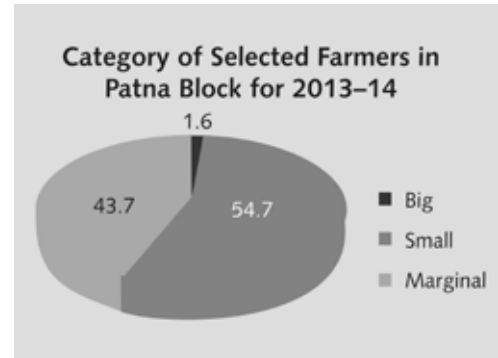


in the fields. Sustainable agriculture is the integration of organic farming with improved practices, optimum utilization of resources, less dependency on the market for seeds and other inputs, reduction of drudgery through women-friendly farm implements and a support system to access their rights.

AREA BACKGROUND

PRADAN, Jashipur team, is working in three blocks, that is, Karanjia, Jashipur and Sukruli, of Mayurbhanj district and one block of Keonjhar district, that is, Patna. These four blocks are tribal-dominated areas, with multiple communities such as Gonds (ST), Bathulis (ST), Kolhos (ST), Mahantas (OBC), Mundas (ST) and others.

The major livelihood activities of these villages are rain-fed agriculture, collection and sale of non-timber forest produce (NTFP) and livestock. Each family has livestock such as goats, pigs and poultry birds, often used as a buffer in a crisis. The sustainable agriculture initiative started in Patna block and gradually expanded to all the other blocks of this team.



BEGINNING

Initially, in 2013–14, the team's main objective was to establish a model around sustainable practices, develop an appreciation of women farmers and make them confident to adopt these practices. This agricultural programme was initiated in 1000 families, with the help of MKSP. The major focus was on introducing and promoting organic practices and giving priority to women farmers. The shifting from inorganic to organic practices was a very intense engagement, and mobilizing the community was difficult. The real concern was to ensure a standard of production and gain the confidence of the community, which had, so far, been using chemical fertilizers and pesticides on the farms.

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In the organic practices being introduced, farmers were advised to prepare organic manure at home. Sometimes, this was not possible due to paucity of labour, frequent engagement in crop management, etc. In order to reach out to the larger community and to bring a change in the area, therefore, the PRADAN team intervened with women leaders of the *gram panchayat*-level Federation (GPLF).

The team organized a visit of the Federation leaders and the Agriculture Resource Persons in Balaghat, to provide to the farmers a basic understanding of sustainable farming and to encourage the engagement of women. An initial training of all the Agriculture Resource Persons and the village leaders was organized with the support of PRAN (a non-government organization) on how to prepare and apply the organic fertilizers and pesticides such as the *pranamrit, bijamrit, agniastra*, etc.

Another visit was organized to Sambhav (a non-government organization) campus, in Nayagarh district, Odisha, to see an ecologically developed farm. GPLF leaders organized a *Mahila krushak mela* and an awareness rally in their *panchayats*, regarding the mass adoption of organic practices. The main objective of the *mela* was to inform women farmers that they could grow more crops by adopting sustainable farming practices.

Each of the women farmers was advised to come with samples of their best field crops such as cereals, pulses, vegetables and also samples of those that didn't grow well for whatever reason. Women farmers also took along disease- and pest-affected samples. Discussions were held in the group, to understand the basic crop production processes and the importance of sustainable practices.

GPLF leaders showed women farmers how to prepare organic products such as *bijamrit* (a herbal product used for seed treatment), pranamrit (a herbal product prepared by poultry compost, oil cake and ash), agniastra (organic insecticide) and handikhaata (preventive pesticide). They reached out to a large number of women's collectives of the area and were successful in involving women in farming. The major crops adopted for cultivation by women farmers include paddy, cow-pea, brinjal, bitter gourd, ridge gourd, tomato and groundnut; they apply organic products prepared using cow urine, cow-dung and locally available leaves to promote plant growth and get a standard yield. Although the team was apprehensive about the production in the initial stages, the community was fairly confident. In fact, they happily declared that

by using organic products, the yield of all the products has increased.

The major objectives of 2015–16 were to equip women farmers with women-friendly technology and methodologies to improve yields, and make agriculture a major source of income. This is being done through the Production Cluster Approach, which is cultivation in a contiguous patch, comprising one or two *gram panchayats* that engage in agriculture collectively. GPLF, considered a Production Cluster, monitors the plans and progress of the activity.

It was in these groups, these informal associations, that women began talking about themselves for the first time

The main strategies adopted last year were:

- Targeting selective crops at the Producer Group (PG) or the village level for collective practice, production and marketing
- Experiencing the use and benefits of the power-operated implements
- Up-scaling sustainable practices with more women farmers in all four blocks
- Ensuring major interventions and practices for crops such as wheat, for maximum benefit

MAJOR SUSTAINABLE AGRICULTURE INTERVENTIONS

The team (although the professionals are at different levels of proficiency), the trainers pool (Agriculture Resource Persons and some expert farmers, practising best practices) and women farmers are building on their experiences through visits to other villages and farms, knowledge-sharing and practices. All the selected families, interested in practising sustainable farming as women farmers, have started applying for various organic products such as the *jeevamrit* (organic fertilizer), handikhaata, agniastra, neemastra (strong organic insecticide) in their crops and are getting beneficial results. Women farmers have enhanced their confidence in organic agriculture through the following sustainable practices.

1. Seed intervention
   a. Preparation and application of *bijamrit*
   b. Utilization of bio-fertilizer (Rhizobium, Phosphate Solubilizing Bacteria, or PSB, and Azotobacter)
   c. Brine water test of paddy
   d. Local seed selection and preservation
2. Integrated nutrition management (compost and Nitrogen, Phosphorous and Potassium, or NPK)
   a. Preparation and application of pit-compost, vermi-compost, NADEP compost
   b. Application of bio-fertilizer
   c. Use of *pranamrit*
3. Integrated pest management
   a. Preparation and application of *handikhaata* (as preventive), *agniastra* (against the fruit and stem borer), *mahulastra* (against fungal disease), *mathastra* (against bacterial disease), etc.
   b. Using bio-pesticide such as trichoderma viride and multi-neem
4. Adoption of improved practices
   a. Horizontal trellis for creepers and vertical trellis for creeper tomato.
   b. Direct seeded rice (DSR) and SRI
   c. Pit method for solanaceous crops such as brinjal and tomato
   d. Using of farm implements (manual and power-operated)

Table 1: Organic Products, Their Uses and Preparation

Preparation of Organic Products using Local Material			
No.	**Purpose**	**Product**	**Material used**
1	Seed treatment	*Bijamrit*	Cow urine, cow-dung, lime, fertile soil
2	Organic fertilizer	*Pranamrit*	Poultry/goat compost, oil cake and ash
3	Fertilizer (increase bio-agent in soil)	*Jivamrit*	Cow-dung, cow urine, jaggery, gram flour, fertile soil
4	Hormone	*Amrit*	Mung seed, chick-pea seed, wheat, cow-pea seed, arhar seed, til
5	Pesticide (Preventive)	*Handikhaata*	Cow-dung, cow urine, neem leaf, karanja leaf, arka leaf, jaggery
6	Insecticide	*Agniastra*	Cow urine, dry tobacco leaf, chilli, garlic, neem leaf
7	Fungal disease	*Mahulastra*	Mahua, jaggery, cow urine
8	Bacterial disease	*Mathastra*	Curd, water

The PRADAN team organized village/hamlet-level training programmes for SHG members, to ensure organic practices, disease-pest management, etc. The participation of women in agriculture practices of their families has been enhanced through this training process. Organic farming saves approximately Rs 400 per 10 decimals of land in vegetables, which was earlier being spent to apply chemical pesticides. People are clearly articulating that the taste of the organic vegetables is much better and they can be preserved for a longer duration because of the organic inputs. So, the market demand of these vegetables is much higher than the chemically grown ones.

Farmers are increasing vegetable cultivation twice over through mechanization and drudgery-reduction interventions. The drudgery-reduction programme also reduces labour costs by two to five times in each intervention and has also empowered women to be the leaders in agriculture. Due to the increase in production of vegetables, more women have started going to the markets to sell their products.

Women farmers say that organic farming is really low-cost, easy to use, not harmful for health and beneficial for soil health. Women farmers share that they are now getting recognition from family members and villagers for their enhanced knowledge on farming and plant protection measures.

Earlier, the men of the families purchased chemical pesticides and fertilizers from the market, which sometimes had no effect, leading to heavy expenditure. This has gradually reduced through the organic interventions by the women. The number of women farmers using organic products has increased in the last three years (Table 2).

After three years of intervention, the PRADAN team feels confident about designing and consolidating its learning. The intervention has created a good movement among women farmers because earlier farmers were struggling to control disease and pest attacks through expensive chemical fertilizers and pesticides.

Table 2: Women Farmers in Patna Block Using Organic Products

Organic Products and Methods	2013–14	2014–15	2015–16
Use of bio/organic products (Net farmers)	835	1,536	1,724
Seed treatment	638	1,213	1,514
Integrated nutrition management	396	936	1,411
Integrated pest management	735	1,436	1,694
Hormone and other micro-nutrients	88	232	291

THE IDENTITY OF WOMEN FARMERS

The impact of the sustainable farming intervention leads us to an analysis of the identity of women farmers. The intervention has been divided into three segments, that is, a) Service system and stakeholders, b) Governance and c) Federation.

The service and support system has helped to enhance the knowledge and skills of women farmers for better utilization of their resources.

The governance part help them to access their rights and entitlements and to create an identity for themselves within the government and other departments.

The Federation creates a platform for better lives and livelihoods. It helps women negotiate with the government for their rights and entitlements.

The Women's Empowerment in Agriculture Index (WEAI), referred to from the International Food Policy Research Institute (IFPRI) indicators, are the guiding principles for the socio-economic and political transformation of women. The team has been engaged with this indicator since 2015.

The WEAI is a universal indicator, comprising the following guiding principles:

- Participation in decision-making on agricultural production, inputs and marketing as a farmer
- Participation in decision-making and ownership for use of land, assets, credit and investment
- Control over the produce and the use of income
- Participation in institutions or farmers' collectives
- Satisfaction and being able to provide time for self and for leisure activities

DRUDGERY-REDUCTION INTERVENTION FOR WOMEN

Women's drudgery-reduction intervention through farm mechanization has two types of implements: manual and power-operated. The majority of small and marginal farmers prefer to use manual implements for their farms. Sometimes women farmers now collectively demand power-operated implements.

Manual implements are being easily operated by women and are also helping them increase the area for cash crops on their farms. Power-operated machines help reduce their dependency on men and also reduce a major drudgery for women during paddy transplanting and harvesting. The use of farm implements is more economical because they invest Rs 1500 per acre in mechanical transplanting of paddy whereas the expenditure was Rs 4000 earlier in the manual process (20 labour days x Rs 200 per day).

GPLFs have purchased power tillers, paddy trans-planters, reapers, power weeders-cum-ridgers, etc., with the help of MKSP. There are also two agro-service centres set up with the help of MKSP in Jashipur and Karanjia blocks. One woman entrepreneur from each block provides agro-services of tractors, seed drills, rotavators (an equipment/attachment used with a tractor for puddling), etc., to farmers.

There are nine SHGs of women in the village, promoted by PRADAN; all are now part of the Baitarani Mahila Sangh (the Regional All Women's SHG Federation)

BUDHIKAPUDI VILLAGE: SHIFT FROM INORGANIC TO SUSTAINABLE PRACTICE

Budhikapudi village is the *gram panchayat* (GP) headquarters of Budhikapudi GP of Patna block, in Keonjhar district. The village was named after the king of Rajnagar saw an old woman rearing a horse; the name literally means 'an old woman rearing horse': Budhikapudi.

There are nine SHGs of women in the village, promoted by PRADAN; all are now part of the Baitarani Mahila Sangh (the Regional All Women's SHG Federation). The first SHG was formed in 2003 and the last in 2011. All the SHGs have formed a village-level Cluster forum in 2006, which meets once a month, to discuss issues and concerns and share achievements and learning.

Of the 100 agrarian families in the village, 73 are part of the intervention, where women, as farmers, are learning and practising sustainable farming practices in a producer group approach. With sustainable agriculture practices, all the women now have nutritional sufficiency and a cash income of Rs 30,000–60,000. The model for agriculture is to sow around the homestead well, the pond and the paddy lands in the *kharif* season. The major crops adopted by the women are SRI/line transplantation in paddy, creepers such as ivy gourd and cow-pea; solanaceous crops such as brinjals, tomatoes, chillis and potatoes. These women usually have 10 to 20 decimals of homestead land on which they grow vegetables organically in the *kharif* as well as *rabi* seasons. They grow paddy in about an acre of land in the *kharif* season only.

Women of this village used a lot of chemical fertilizers and medicines for their crops earlier. Initially, therefore, organic farming was

Table 3: Commonly Used Implements

Crops	Manually-operated	Power-operated
Paddy	Plough, marker, cono-weeder, wheel hoe	Power tiller, tractor, seed drill, trans-planter, weeder, reaper
Vegetables	Plough, wheel hoe, marker, ridger, seed drill, drum seeder	Power tiller, tractor, pit digger, seed drill, weeder-cum-ridger, sprayer

difficult for them. Now, however, with regular training and by witnessing demonstrations, they have started adopting new practices. They have begun to prepare organic manure and medicines using locally available reduced material and their input cost in agriculture has been by five to six times. Their production has also increased.

Organic farming has become so popular among the women that they are now teaching these techniques to the other families of the village and nearby villages

Organic farming has become so popular among the women that they are now teaching these techniques to the other families of the village and nearby villages. With the introduction of the drudgery-reduction machines such as weeders, reapers and power-operated sprayers and ridgers, women are now able to manage their crops easily with much less labour.

PRADAN and the women's Federation, the Baitarani Mahila Sangh, have jointly prepared a support mechanism and an engagement strategy to create an identity for women farmers as well as a sustainable income for them. The strategy is divided into three parts, that is, institution mechanism, support system, and rights and entitlements for women farmers, as per the experience. Trained Agriculture Resource Persons are engaged in one or two GPs, to ensure the service system on the ground.

Planning also encompassed nutrition of the family. The women were made aware of the nutritional requirement and the importance of providing complete food in the initial stages

Table 4: Sustainable Agriculture Planning for a Sample Family of Five Members

Nutrition and Cash Requirement from Agriculture (Yearly)		Land Details (Average Land-holding 1.2 Acres) and Crop Planning			
Paddy (3 kg rice/6 kg paddy per day) in quintals	22	Land pattern	*Kharif* crops	*Rabi* crops	Yield and Outcomes
Pulses (@ 50 gm on alternate days for a year) in kg	45	Lowland (20 decimals) irrigated with ring-well	Paddy (line sowing)	Vegetables (Tomato/Chillies)	Paddy 4 quintals, Cash Rs 20,000
Vegetables (7.5 kg per week) in quintals	4	Medium-land (60 decimals)	Paddy DSR/ SRI	Green gram (20 decimals only)	Paddy 15 quintals, Pulses 25 kg
Potatoes (3.5 kg per week) in quintals	2	Upland (20 decimals)	Paddy DSR	Horse gram	Paddy 3 quintals, Pulses 20 kg
Cash income	Rs 50,000	Homestead (20 decimals)	Vegetables (3 decimals): Kitchen garden mode		Vegetables for family
			Vegetable (creepers) with *machan* 18 decimals	Vegetables (solanaceous) 15 decimals, potato 2 decimals	Potato 2 quintals, Cash Rs 30,000

Table 5: Broad Strategies for Sustainable Income for Women Farmers

Institution Mechanism	Support Service System		Women's Rights and Entitlements
	Training Designed	Arrangement of Farm Implements	
PG of women farmers at village/hamlet level. Building linkages among women farmers and with the government, banks, private depts. Creating better service systems on knowledge, skill-building, value addition, collective marketing, etc.	Establishing women farmers' identity, introducing organic practices, initiating major intervention of crops, teaching the use of farm implements and drudgery reduction, helping create irrigation infrastructure through government projects on irrigation and agriculture, creating a farmer's institution, improving nutrition, arranging for seed collection and preservation, organizing collective marketing.	Demonstration on the use of implements. Services on power-operated implements from Federations.	Accessing Kisan Credit Card (KCC), getting bank loans, participating in palli sabha, arranging for irrigation through government departments and projects, using MGNREGA

of a child's life. The team is now preparing a strategy to fulfill the nutrition needs as per the Food Consumption Score (FCS): Malnutrition is visible across the area, especially among women and children.

FCS is a measurement of the weekly nutritious food consumption of any person. The PRADAN team has taken FCS as a guiding tool. Although rice is the major food of this area, the consumption of pulses, vegetables and meat are also required to fulfill nutrition needs. People are unable, however, to purchase pulses and vegetables on a regular basis due to poverty. Therefore, while creating awareness among women farmers on the importance of nutritious food, we are also facilitating the cultivation of pulses and vegetables on their land.

COW-PEA CULTIVATION IN SUSTAINABLE PRACTICES

There are different interventions for sustainable practices in cow-pea. These are introducing the use of organic materials, pit method, trellis and power-operated farm implements in 20 decimals for a sample family. The comparison

Table 6: Comparison between Chemical and Organic Practice in 10 decimals of Cow-pea Production

Chemical Practice		Organic Practice	
Required Material	Amount in Rupees	Required Material	Amount in Rupees
Seed: 100 gm	200	Seed: 100 gm	200
Compost: 5 quintals	300	Compost: 5 quintals	300
DAP: 10 kg	300	Cow urine: 50 ml	2
MOP: 10 kg	200	Rhizobium: 50 gm	4
Urea: 5 kg	50	PSB - 50 gm	4

Chemical Practice		Organic Practice	
Required Material	Amount in Rupees	Required Material	Amount in Rupees
Boron: 50 gm	20	Vermi-compost: 10 kg	60
Saaf: 100 gm	75	*Pranamrit*: 20 kg	170
Ektara: 10 gm	50	*Jivamrit*: 6 litrs	60
Savin: 50 gm	25	Neem cake: 10 kg	200
Redomil	10	*Handikhaata*: 2.5 litres	25
Furadon: 2 kg	150	*Agniastra*: 2.5 litres	75
		Neem Oil: 1.5 litres	120
Total Expenditure	Rs 1,380	Total Expenditure	Rs 1,220

between the chemical and organic practice can be measured.

The total benefit of using organic products for 20 decimals of land, therefore, is Rs 320. The expenditure may be less in case of organic practice due to locally available materials, which farmers can easily collect from their area. After calculating the cost of all the

Table 7: Cow-pea Intervention in 20 Decimals with Sustainable Agriculture Process

Expenditure for Trellis in 20 decimals (6 kg Net @ Rs 280 and 5 kg Galvanized Iron (GI) wires @ Rs 80 for 3 years) = (6 x 280 + 5 x 80)/ 3–Round				700 (rounded off)
Drudgery reduction intervention	**Intervention**	**Manual**	**Power instrument**	**Total Benefit**
	Pit (400 no.)	Rs 600 (@ Rs 1.5 per pit and 1.5 ft depth)	Rs 800 (@ Rs 2 per pit and 2 ft depth)	200
	Weeding	Rs 600 (3 labour days)	Rs 200 (@ Rs 10 per decimal)	
Outcomes		**Output and Income Enhanced**		
Approximately 80% production enhanced and investment reduced		Traditional yield: 500 kg; Yield after intervention: 900 kg (400 kg @ Rs 10)		4,000
Proper plant growth and fruiting		Expenditure reduced due to organic farming		320
Easy to collect fruit from plants because the height of trellis is around 6 ft.		Expenditure reduced due to use of farm implements		200
Easy to nurture plant in case of disease pest management		Total benefit for farmers in 20 decimals of land with sustainable practices (Rs 4000 + 320 + 200–700)		3,820

interventions, a farmer can get an additional income of Rs 3,800 from 20 decimals as shown in the table 7.

BANABASI MAHARANA'S EXPERIENCE

"My name is Banabasi Maharana and I am from Dhanurjaypur village of Chemana GP, Keonjhar. I am working as an Agriculture Resource Person in Chemna and Bausuli GP. For the last three years, I have promoted organic farming in paddy, creepers and other vegetable cultivation. The fungal diseases of the crops are checked because seeds are treated with *bijamrit*. *Pranamrit*, which is prepared with poultry droppings, mustard oil cake and ash, is a good nutrient for the plants. We had to standardize the required doses, however. *Pranamrit* is given as a basal dose and again during the first inter-cultural operation. It improves soil health also.

Because of the use of *jivamrit*, we get more seedlings now, the plants are becoming healthier and growing better, and giving a better yield. *Agneyastra*, prepared by mixing cow urine, neem leaves and a paste of garlic, chilli and tobacco leaves, is effective in checking fruit borer, stem borer and leaf cutting pests. Disease and pest attacks are rare because *handikhaata* is being applied as a preventive at a seven-day interval.

The focussed training and field-based demonstration by the *Mahila Krushak* on organic agriculture, organic seed treatment, and preparation and application of organic products for plant growth and pest control has been helpful for the women and has motivated them. I feel happy when I see the smile on the *didis*, faces as they share their success stories."